

HUMAN METHIONINE SYNTHASE REDUCTASE: CLONING, AND
METHODS FOR EVALUATING RISK OF NEURAL TUBE DEFECTS,
CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME

Abstract of Invention

The invention features a novel gene encoding methionine synthase reductase. The invention also features a method for detecting an increased likelihood of hyperhomocysteinemia and, in turn, an increased or decreased likelihood of neural tube defects, cardiovascular disease, Down's Syndrome or
5 cancer. The invention also features therapeutic methods for treating and/or reducing the risk of cardiovascular disease, Down's Syndrome, cancer, or neural tube defects. Also provided are the sequences of the human methionine synthase reductase gene and protein and compounds and kits for performing the methods of the invention.

10 50004.003004 application.wpd